OIPE
JAN 14 2004
PATENT & TRADEMARK OFFICE

FIG. 1

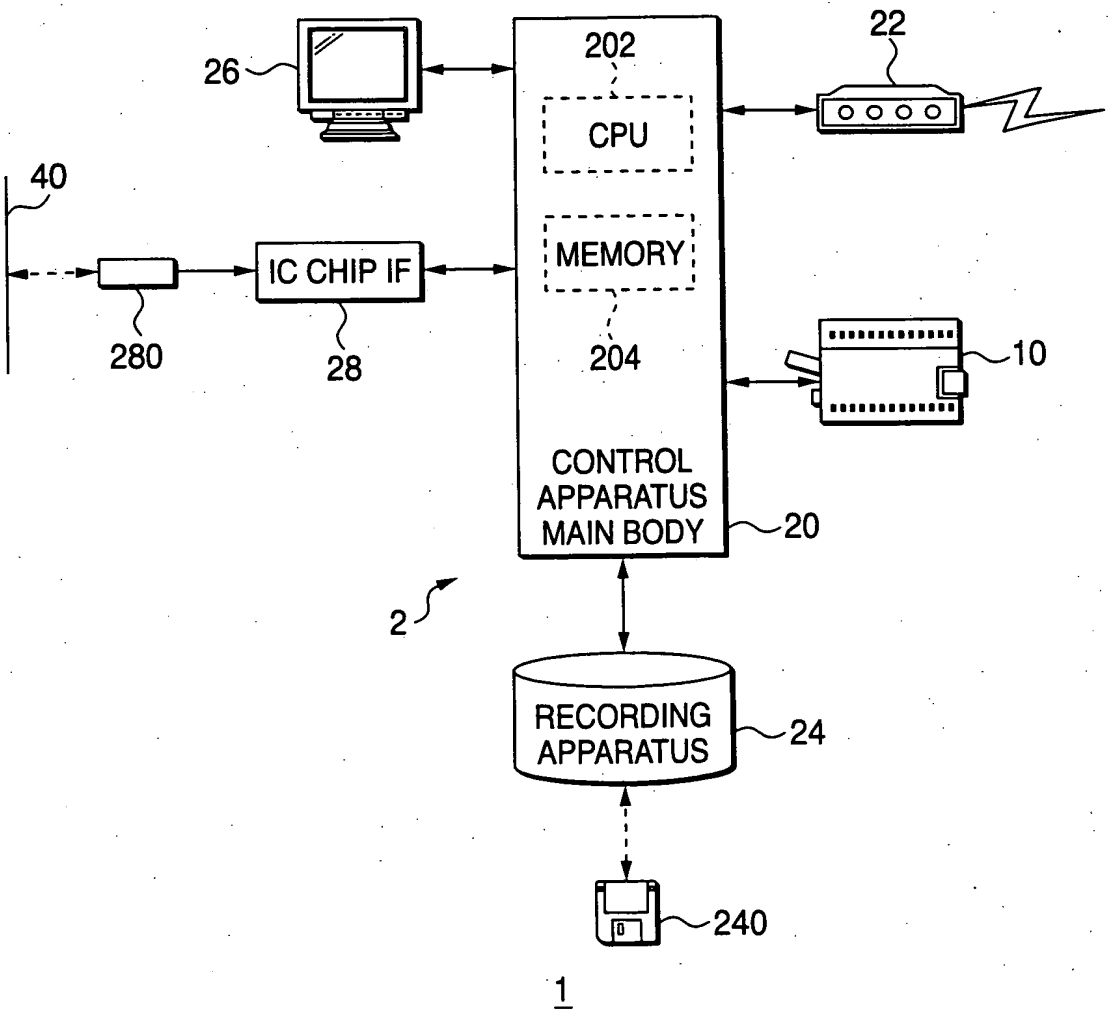

FIG. 2A

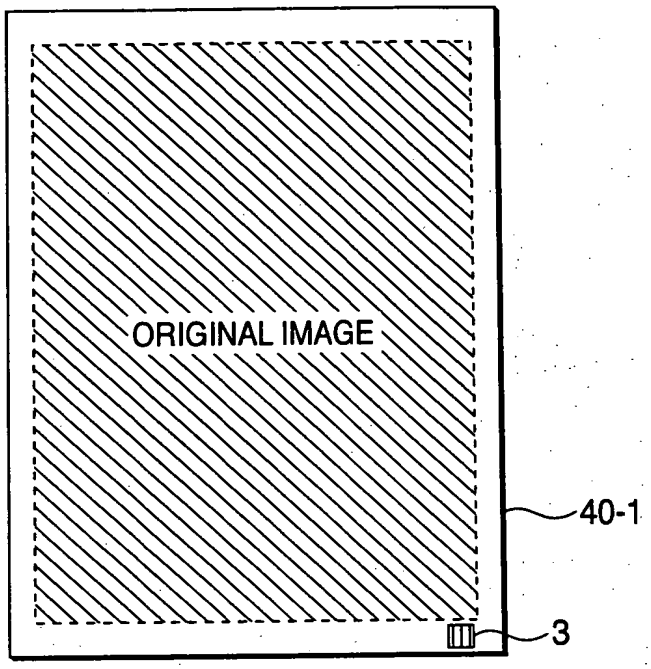
ORIGINAL IMAGE
40-1
3

FIG. 2B

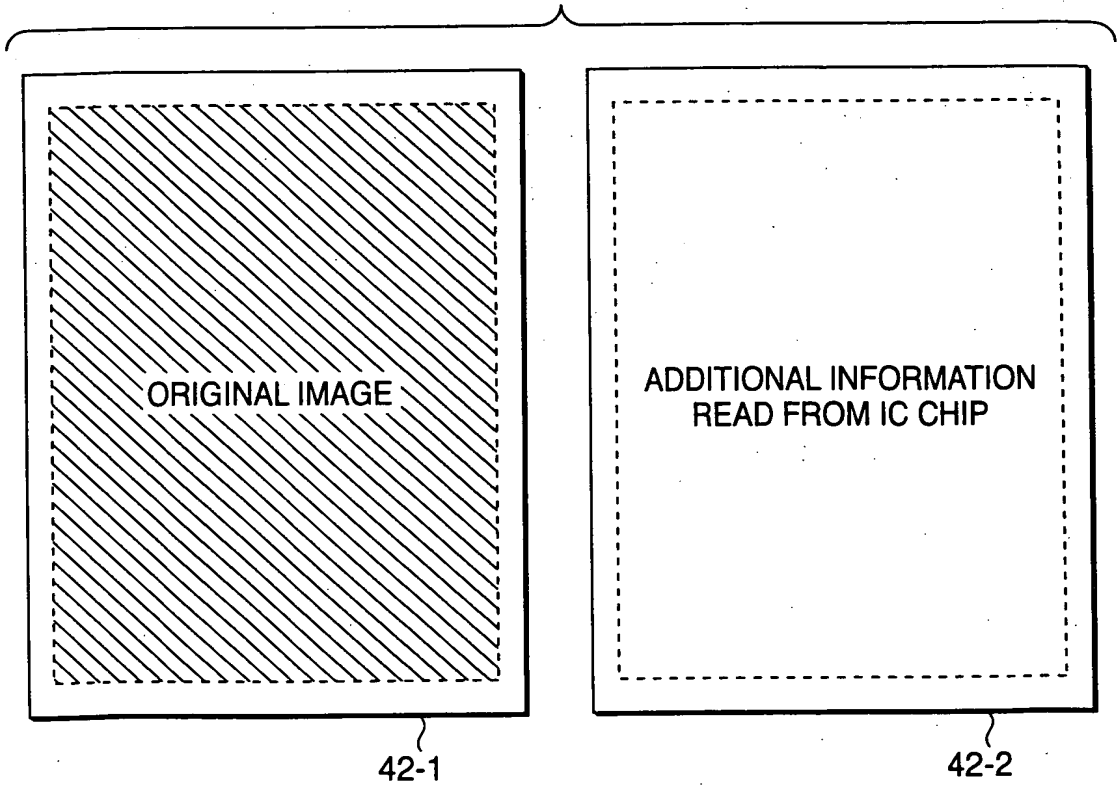
ORIGINAL IMAGE
ADDITIONAL INFORMATION
READ FROM IC CHIP
42-1
42-2

FIG. 3

ADDITIONAL INFORMATION A (IMAGE)
ADDITIONAL INFORMATION B (TEXT)
ADDITIONAL INFORMATION C (VOICE)

FIG. 4

(FIG.5)

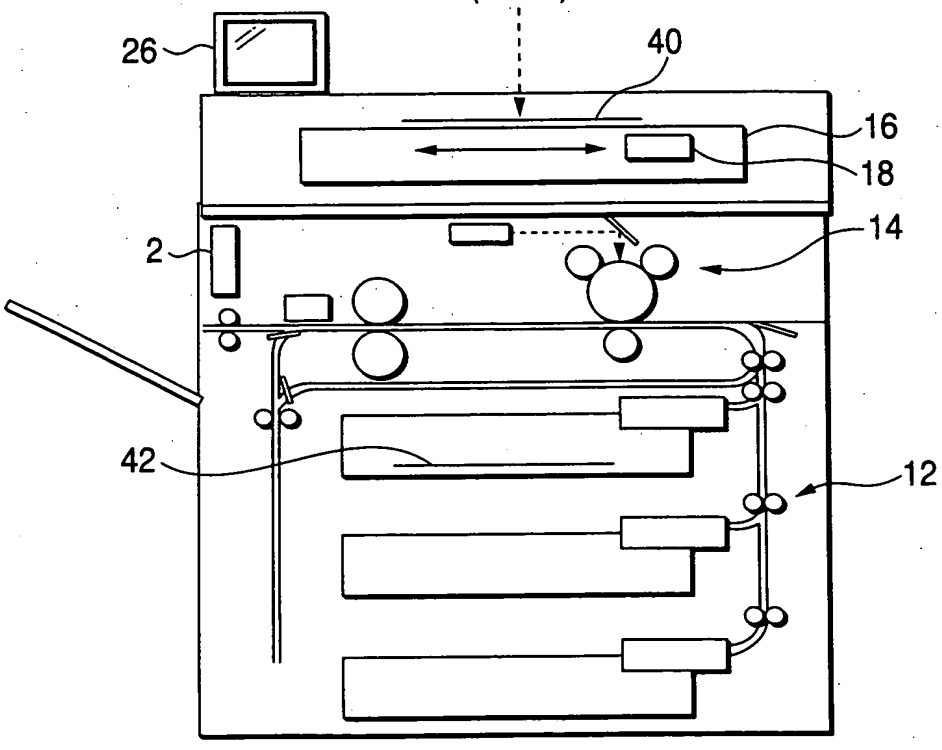

FIG. 5

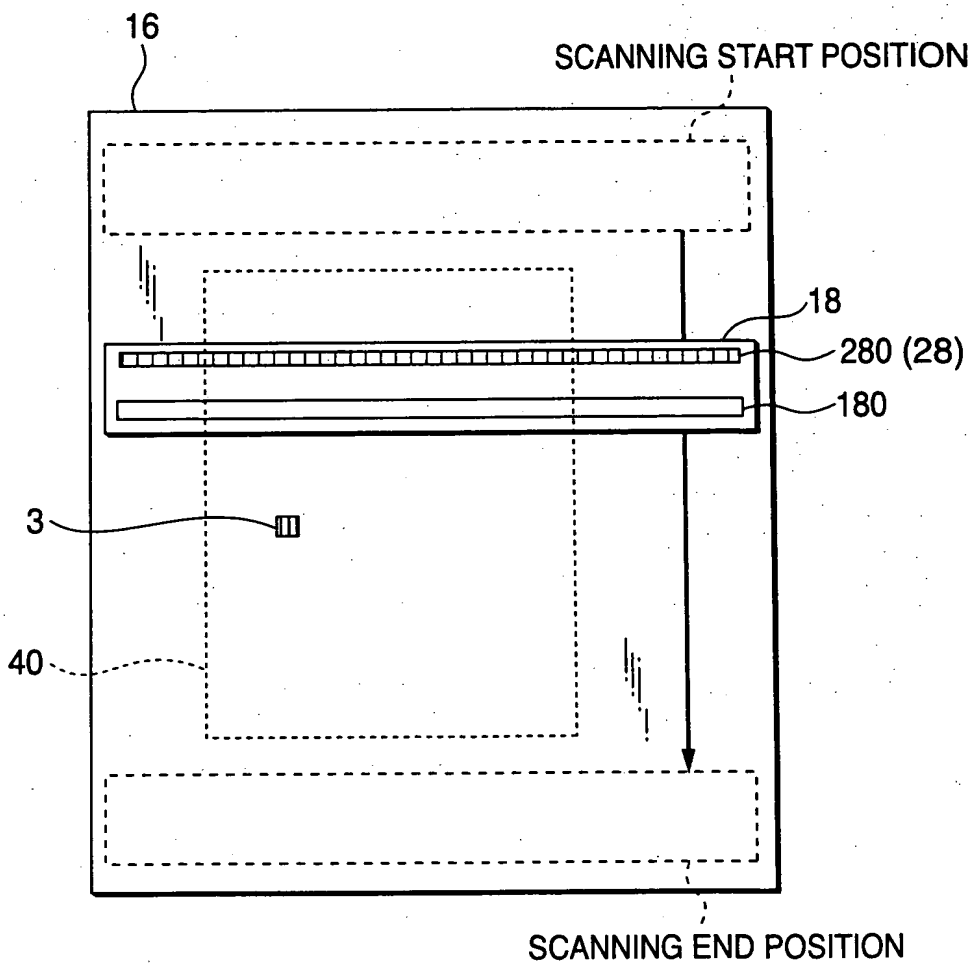
16
SCANNING START POSITION
18
280 (28)
180
3
40
SCANNING END POSITION

FIG. 6

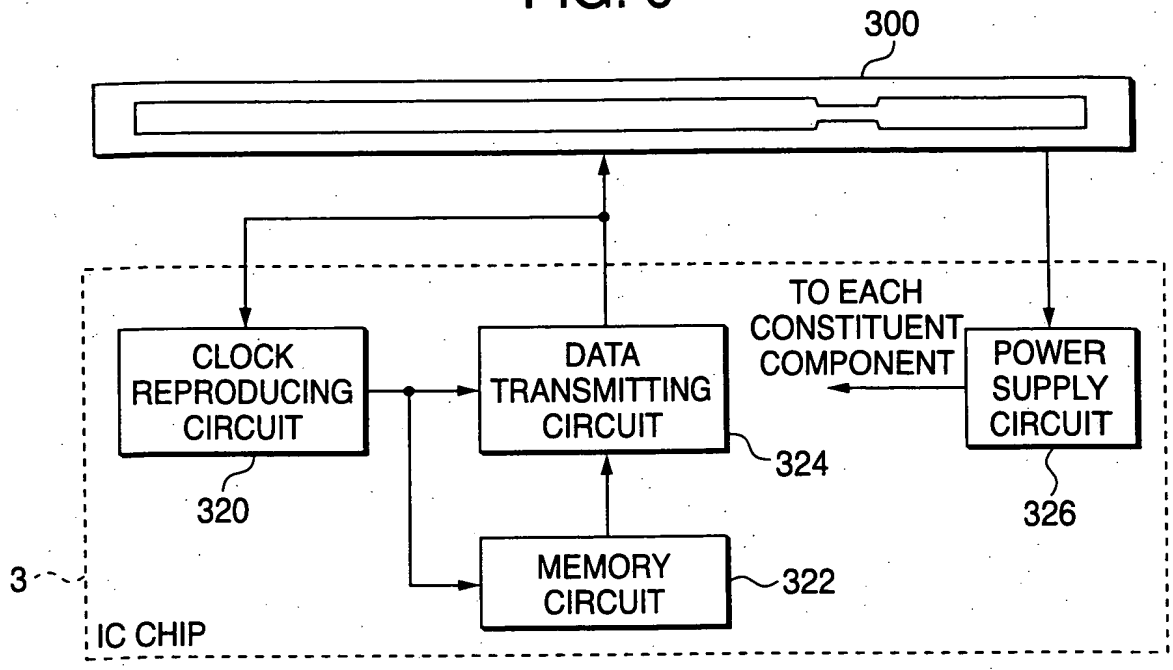
300
CLOCK REPRODUCING CIRCUIT
320
DATA TRANSMITTING CIRCUIT
324
TO EACH CONSTITUENT COMPONENT
POWER SUPPLY CIRCUIT
326
MEMORY CIRCUIT
322
3
IC CHIP

FIG. 7

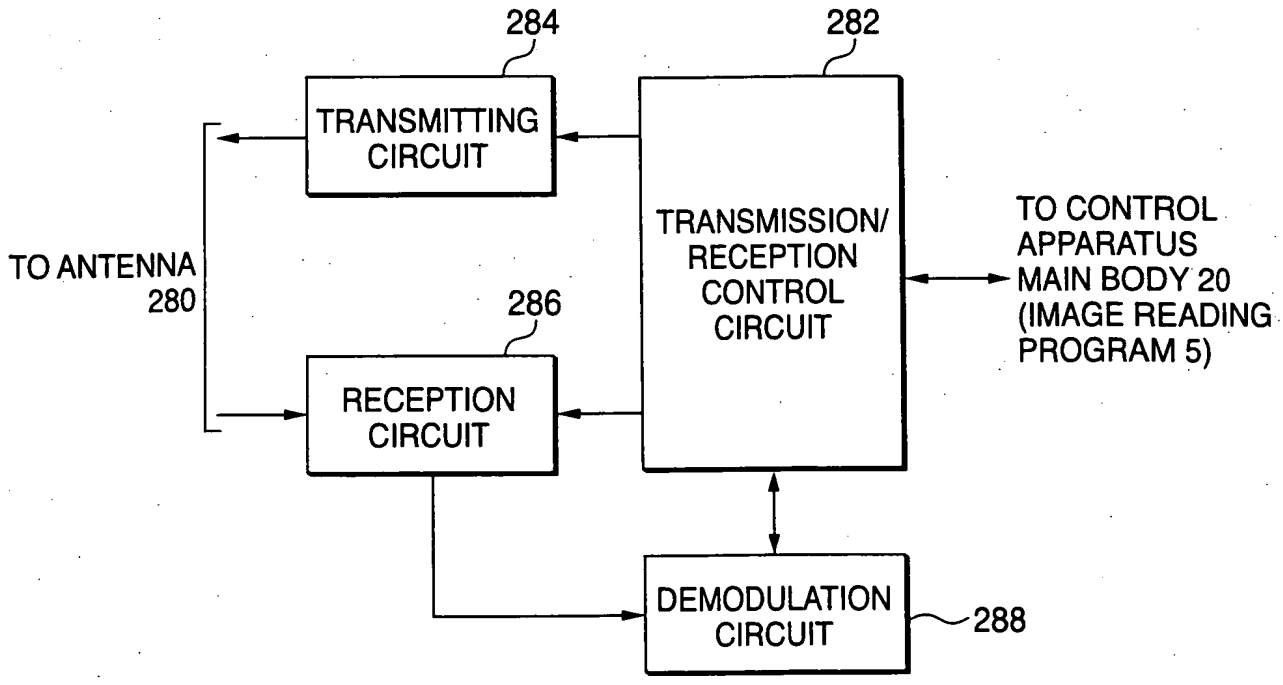
284
282
TRANSMITTING CIRCUIT
TRANSMISSION/ RECEPTION CONTROL CIRCUIT
TO CONTROL APPARATUS MAIN BODY 20 (IMAGE READING PROGRAM 5)
TO ANTENNA 280
286
RECEPTION CIRCUIT
DEMODULATION CIRCUIT
288
28

FIG. 8

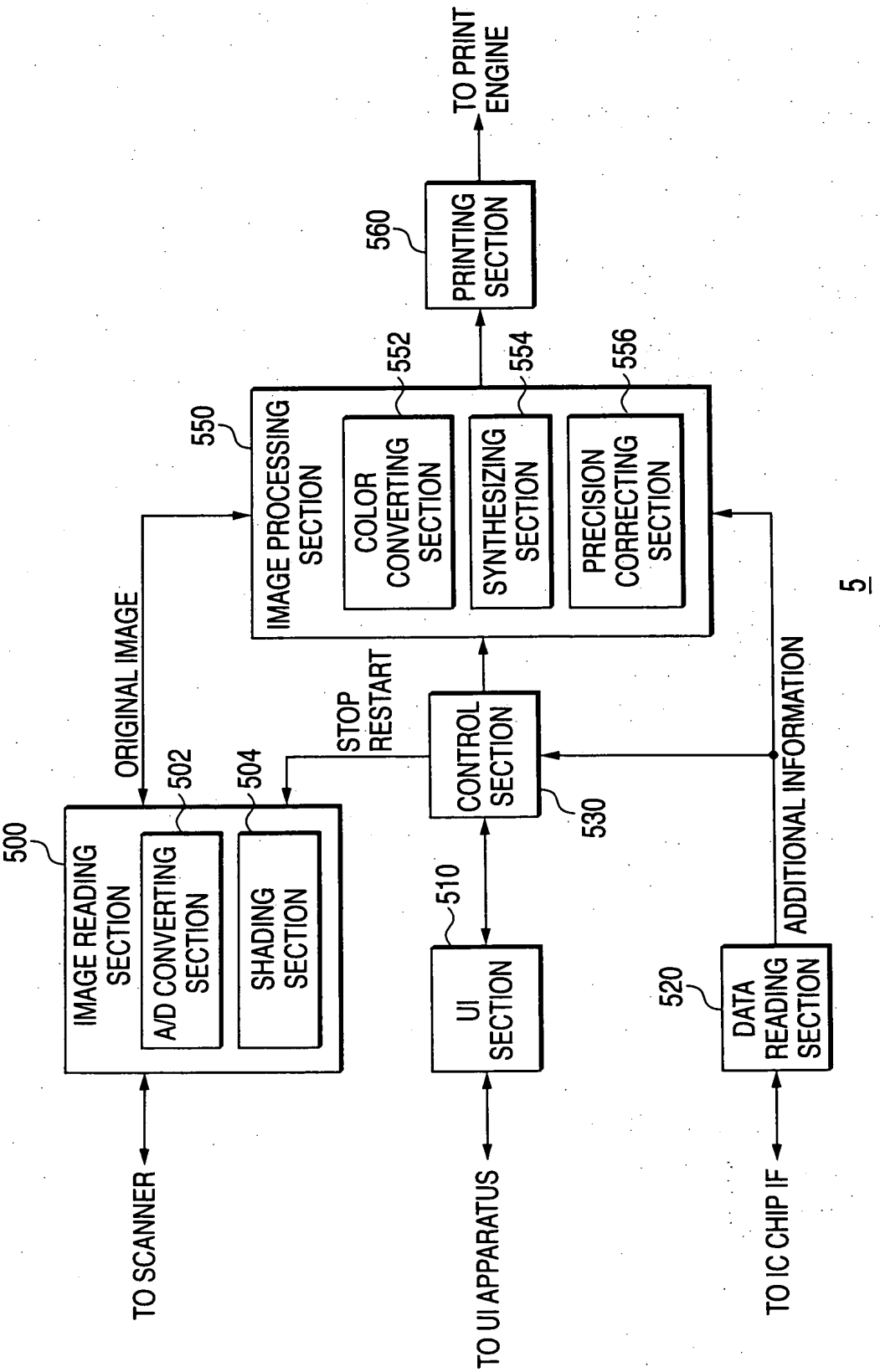
TO SCANNER
TO UI APPARATUS
TO IC CHIP IF
500
IMAGE READING SECTION
A/D CONVERTING SECTION
502
SHADING SECTION
504
ORIGINAL IMAGE
510
UI SECTION
520
DATA READING SECTION
ADDITIONAL INFORMATION
STOP
RESTART
CONTROL SECTION
530
550
IMAGE PROCESSING SECTION
COLOR CONVERTING SECTION
552
SYNTHESIZING SECTION
554
PRECISION CORRECTING SECTION
556
560
PRINTING SECTION
TO PRINT ENGINE
5

FIG. 9

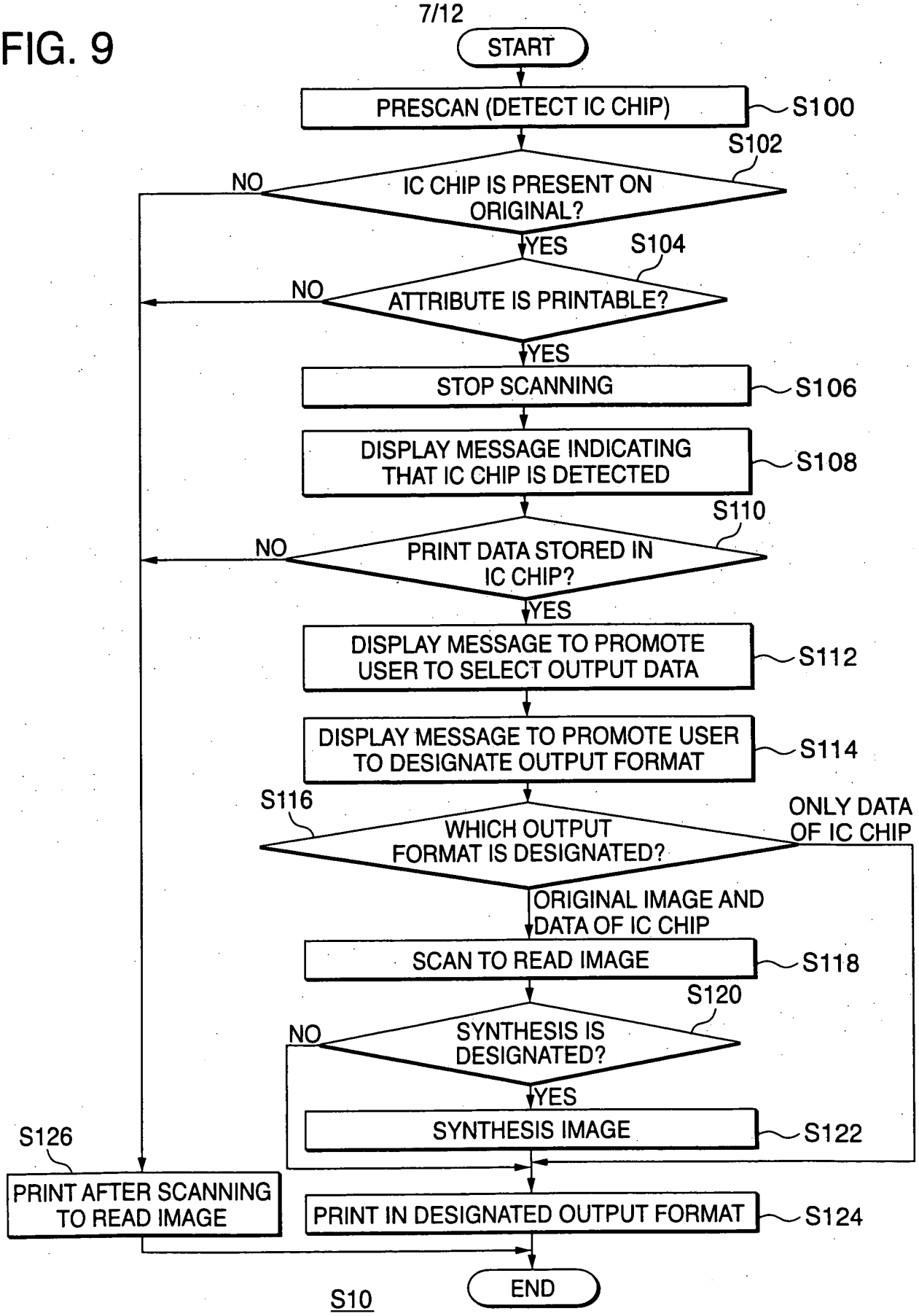
START
PRESCAN (DETECT IC CHIP)
S100
S102
IC CHIP IS PRESENT ON ORIGINAL?
NO
YES
S104
ATTRIBUTE IS PRINTABLE?
NO
YES
STOP SCANNING
S106
DISPLAY MESSAGE INDICATING THAT IC CHIP IS DETECTED
S108
S110
PRINT DATA STORED IN IC CHIP?
NO
YES
DISPLAY MESSAGE TO PROMOTE USER TO SELECT OUTPUT DATA
S112
DISPLAY MESSAGE TO PROMOTE USER TO DESIGNATE OUTPUT FORMAT
S114
S116
WHICH OUTPUT FORMAT IS DESIGNATED?
ONLY DATA OF IC CHIP
ORIGINAL IMAGE AND DATA OF IC CHIP
SCAN TO READ IMAGE
S118
S120
SYNTHESIS IS DESIGNATED?
NO
YES
SYNTHESIS IMAGE
S122
S126
PRINT AFTER SCANNING TO READ IMAGE
PRINT IN DESIGNATED OUTPUT FORMAT
S124
END
S10

FIG. 10

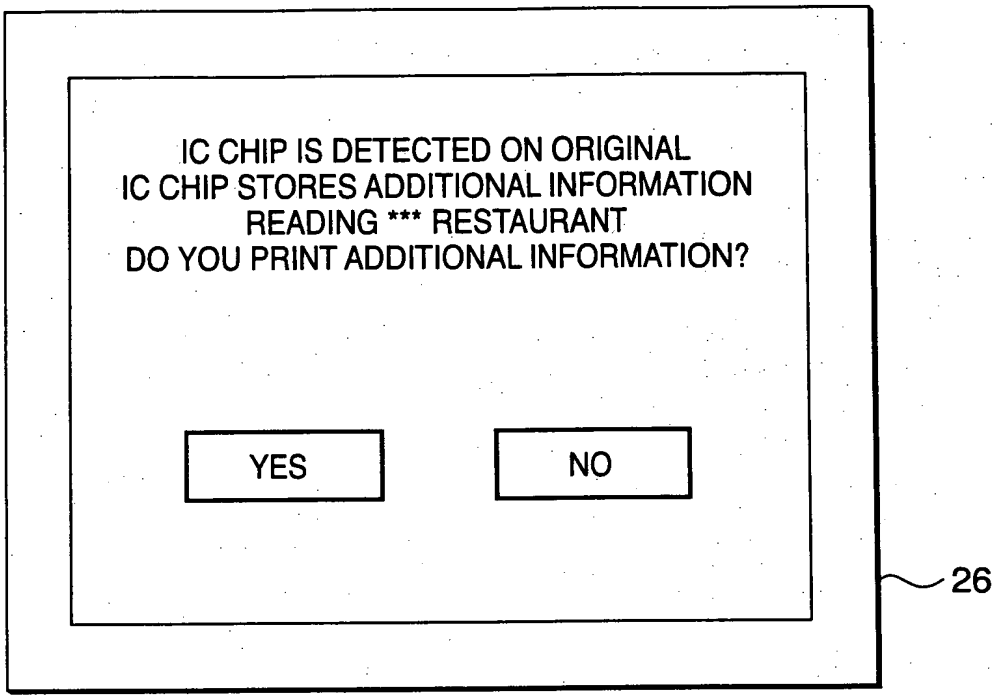
IC CHIP IS DETECTED ON ORIGINAL
IC CHIP STORES ADDITIONAL INFORMATION
READING *** RESTAURANT
DO YOU PRINT ADDITIONAL INFORMATION?
YES
NO
26

FIG. 11

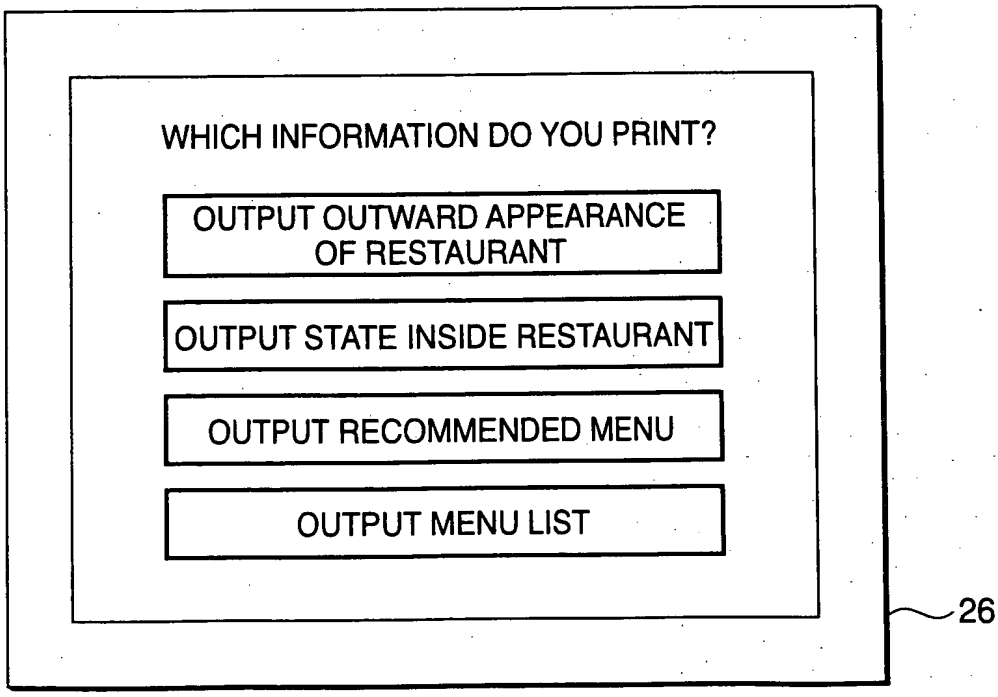
WHICH INFORMATION DO YOU PRINT?
OUTPUT OUTWARD APPEARANCE OF RESTAURANT
OUTPUT STATE INSIDE RESTAURANT
OUTPUT RECOMMENDED MENU
OUTPUT MENU LIST
26

FIG. 12

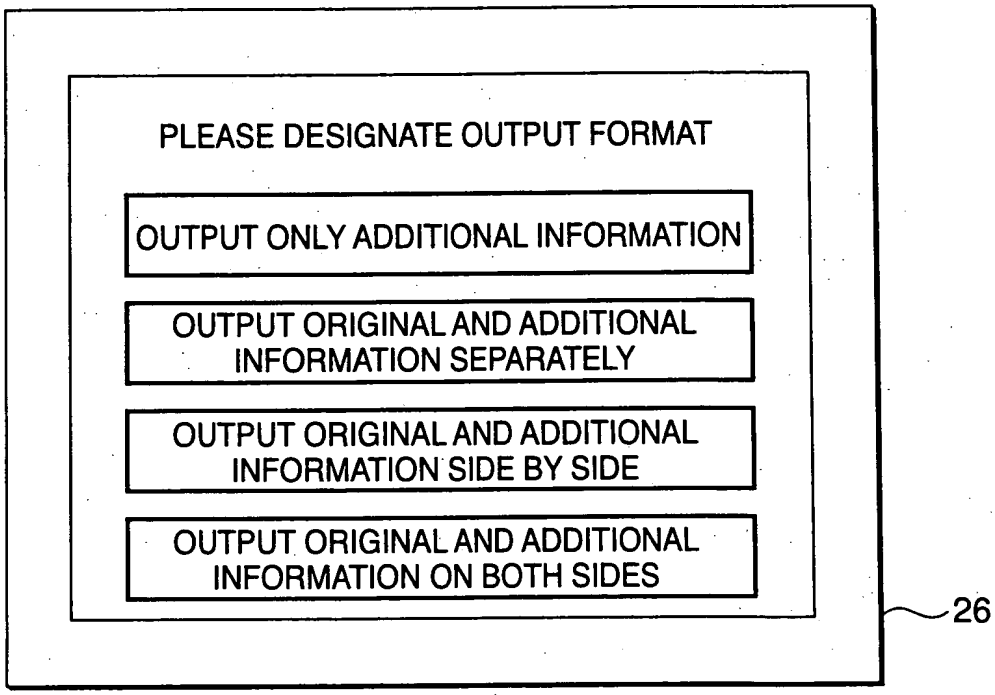
PLEASE DESIGNATE OUTPUT FORMAT
OUTPUT ONLY ADDITIONAL INFORMATION
OUTPUT ORIGINAL AND ADDITIONAL INFORMATION SEPARATELY
OUTPUT ORIGINAL AND ADDITIONAL INFORMATION SIDE BY SIDE
OUTPUT ORIGINAL AND ADDITIONAL INFORMATION ON BOTH SIDES
26

FIG. 13A

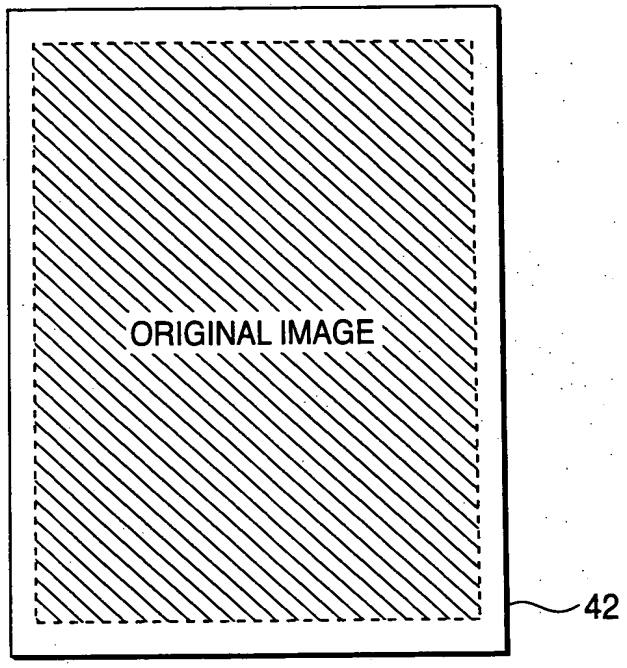

FIG. 13B

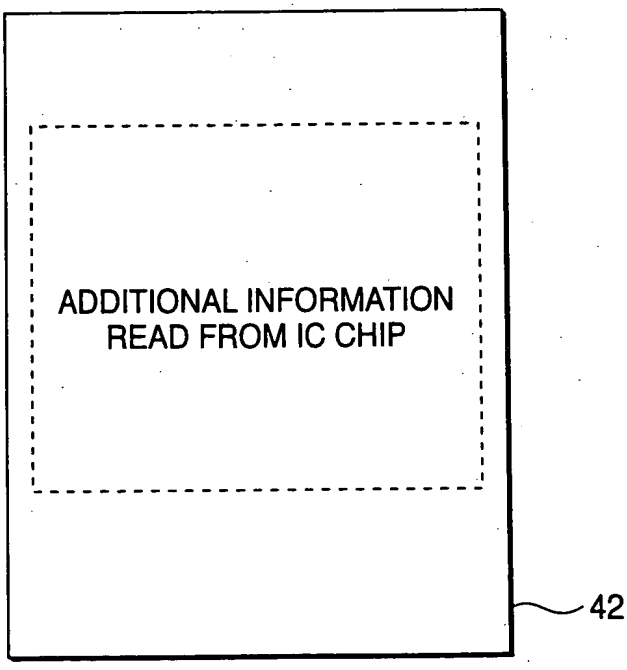

FIG. 14

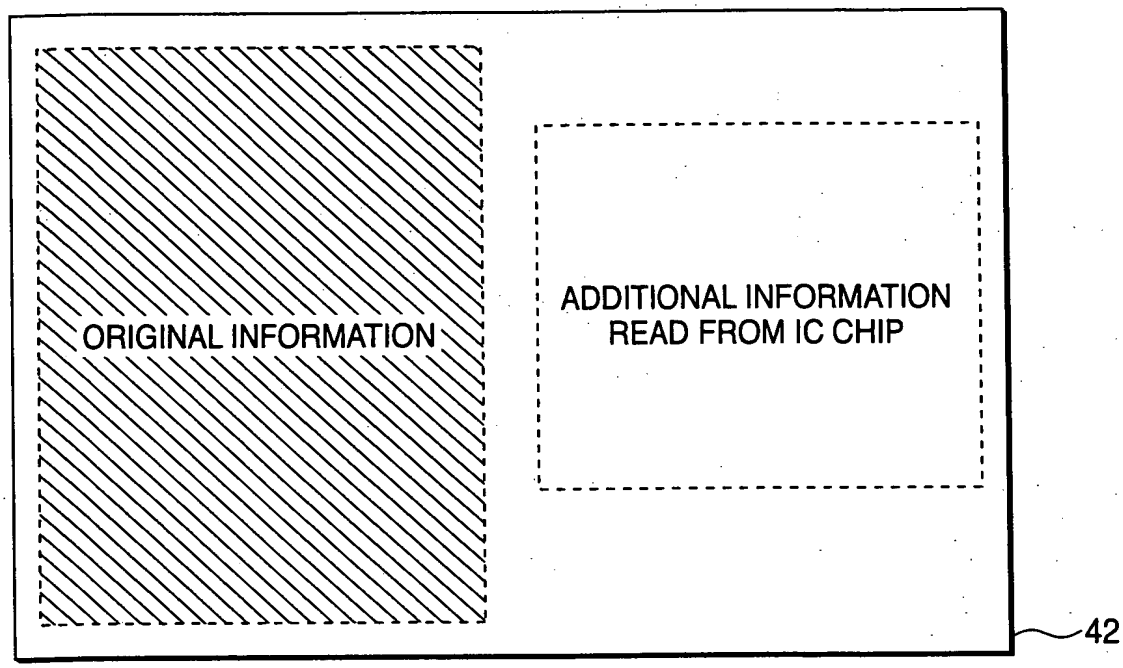
ORIGINAL INFORMATION
ADDITIONAL INFORMATION
READ FROM IC CHIP
42

FIG. 15A

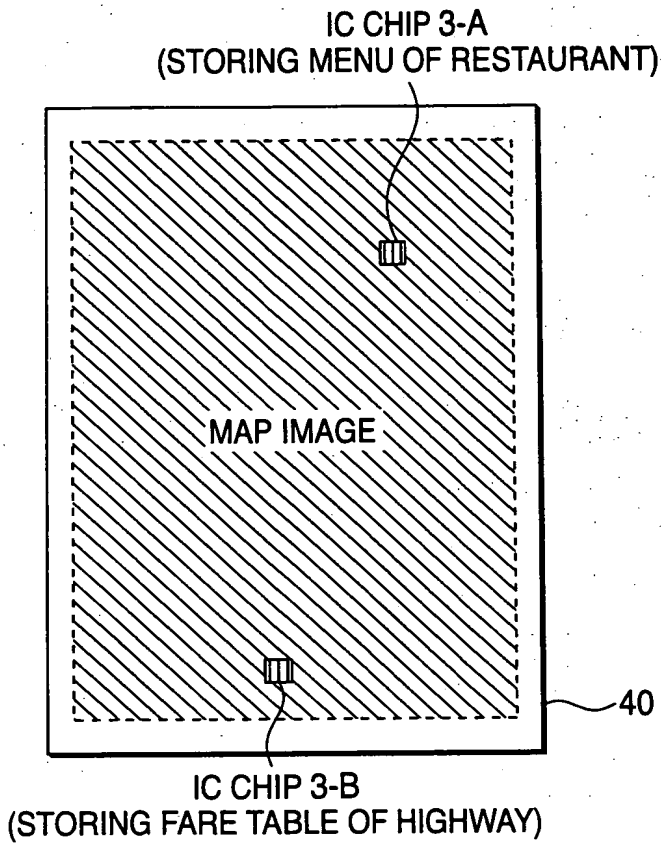
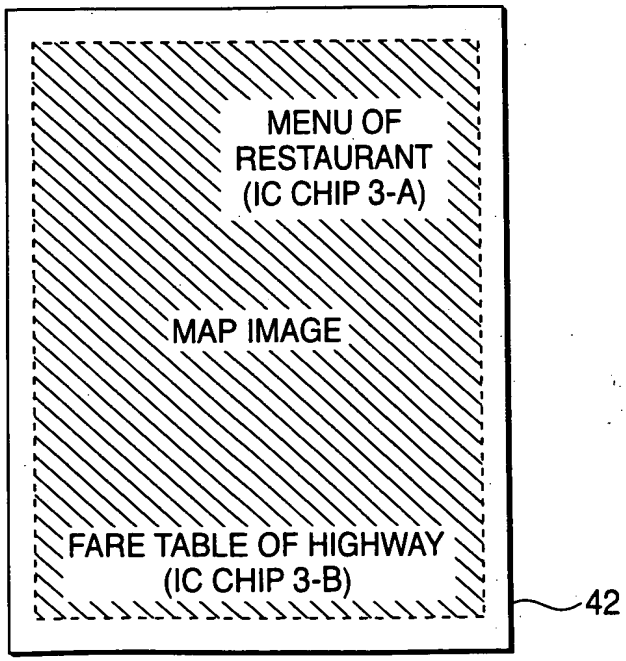
FIG. 15B